IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	FRANK LOGAN, ET AL	)
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Serial No.:	Continuation of 09/024,773	)
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Filed:	Herewith	)
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For:	WINDOWS-BASED FLOW-CHARTING GENERATION SYSTEM	)
		)

PRELIMINARY AMENDMENT

Assistant Commissioner of Patents and Trademarks
Washington, D.C. 20231

Dear Sir:

As a preliminary amendment in the above-referenced continuation application filed concurrently herewith, please cancel claims 1-16 and add claims 17-38 as specified below.

IN THE CLAIMS

Please add the following new claims.

17. (New). A machine programming and control system, comprising:

a machine;

a computer based controller coupled to the machine and being adapted to edit, debug, and generate a continuous multi-block flowchart and to control the operations of the machine in accordance with the flowchart; and

a display coupled to the computer based controller based controller adapted to aid in editing and generating the flowchart, the display including a screen divided into a plurality of columns and rows, the display for adapted to display the flowchart with a plurality of blocks, each of the plurality of blocks being disposed within a cell defined by the columns and rows.

18. (New). The system, as set forth in claim 17, wherein the computer based controller automatically generates high level source code for the program from the flowchart.

19. (New). The system, as set forth in claim 17, wherein the computer based controller automatically draws a connecting line between two associated ones of the blocks after editing.

20. (New). The system, as set forth in claim 17, wherein the display is adapted to display a split screen having two portions and selectively displaying blocks in at least one of the portions.

21. (New). The system, as set forth in claim 17, wherein the display is adapted to form a debugging window for displaying the blocks and having a tool bar for controlling program flow.

22. (New). The system, as set forth in claim 21, wherein the tool bar includes a toggle labels button and the computer based controller responds to actuation of the button for switching between default labels and alternate labels displayed for the blocks.

23. (New). The system, as set forth in claim 21, wherein the tool bar includes a Select Active Block button and the computer based controller responds to actuation of the button for displaying a currently active one of the blocks.

24. (New). The system, as set forth in claim 21, wherein the tool bar includes an Insert/Remove breakpoint button and the computer based controller responds to actuation of the button for displaying a currently active one of the blocks in a predetermined color and stopping execution of the program before executing the currently active block.

25. (New). The system, as set forth in claim 24, wherein when the program reaches one of the blocks having a breakpoint, the computer based controller responds by changing the predetermined color to another predetermined color.

27. (New). The system, as set forth in claim 17, wherein the computer based controller includes means for adding a break point associated with a flowchart block and wherein the computer based controller being adapted to stop at the break point during the debugging mode.

28. (New). The system, as set forth in claim 20, wherein the computer based controller includes means for selectively displaying a second set of blocks in an other of the portions.

29. (New). The system, as set forth in claim 20, wherein the computer based controller includes means for selectively displaying a list of source code associated with the first of the blocks in an other of the portions.

30. (New). The system, as set forth in claim 20, wherein the computer based controller includes means for selectively displaying one of a second set of blocks and a list of source code associated with the first of the blocks in an other of the portions.

31. (New). The system, as set forth in claim 17, wherein a width of each column and a height of each row is determined in accordance with a size and spacing of the blocks.

32. (New). A method of machine programming and control, comprising the steps of: editing and generating a continuous multi-block flow chart via a computer based controller, the flow chart representing a program for controlling the operations of a machine connected to the computer based controller; operating the machine in accordance with the flowchart; and, displaying a plurality of blocks on a screen divided into a plurality of columns and rows, the plurality of blocks comprising the flowchart, each of the plurality of blocks being disposed within a cell defined by the columns and rows.

33. (New). The method, as set forth in claim 32, wherein a width of each column and a height of each row is determined in accordance with a size and spacing of the blocks.

34. (New). The method, as set forth in claim 32, including the step of automatically generating high level source code for the program from the flowchart.

35. (New). The method, as set forth in claim 32, including the step of automatically drawing a connecting line between two associated ones of the blocks after editing.

36. (New). The method, as set forth in claim 32, including the step of displaying a split screen having two portions and selectively displaying blocks in at least one of the portions.

37. (New). The method, as set forth in claim 32, including the step of forming a debugging window for displaying the blocks and having a tool bar for controlling program flow.